INDEX TO SURGICAL PROGRESS.

GENERAL SURGERY.

I. Glycerin Intoxication after Injections of Iodoform and Glycerin. By Dr. LEOPOLD SCHELLENBERG (Breslau). Since 1866, when Husemann found glycerin to have a poisonous action on frogs, we have increasing evidence of its toxic action. The symptoms vary with the amount of the dose, but in general they consist of frequent pulse, rise of temperature, paralysis of the muscles, congestion of the kidneys and hæmoglobinuria. Most of the cases reported have been caused by injecting glycerin into the womb to bring on labor.

The author has observed twenty-one cases of glycerin-poisoning in children in whom iodoform and glycerin had been injected for tubercular disease. The cases can be divided into the following groups according to their clinical symptoms:

(1) *Mild Cases.*—Several hours after the injection a slight rise of temperature occurs, the pulse becomes rapid, and the patients have a little pain at the site of the puncture. The urine is high-colored, containing a little hæmoglobin. No blood-cells, casts, or renal epithelium present. There is a little albuminuria which continues longer than the hæmoglobinuria. After about twenty-four hours the symptoms disappear and the urine returns to normal.

(2) *Severe Cases.*—The temperature and pulse are more affected than in the previous cases. The patients have a peculiar pale, sallow complexion, and present nervous symptoms which make one think of meningitis. The urine is of a dark-brown color and deposits a copious dark sediment in which are found renal epithelium casts covered with colored granules and detritus. The hæmoglobinuria disappears after fifty-six hours or before. There are no blood-cells present.

(3) *Fatal Cases.*—One case of this kind was observed. The symptoms were similar to those of the previous group. The patient went into collapse soon after the injection and died on the third day. The autopsy showed acute parenchymatous nephritis and œdema of the meninges. The kidneys were filled with hæmoglobin.

Undoubtedly, the iodoform produced or augmented some of the symptoms in the severe cases, but they are not to be looked upon as cases of iodoform-poisoning, as the kidneys were the organs most affected, and iodoform produces no kidney lesion, moreover iodine could not be detected in the urine in some of the mild cases, and when it was present it usually appeared some time after the hæmoglobinuria.

It is not improbable that the acute nephritis caused by the glycerin prevents the excretion of the iodoform and thus augments its toxic effects.

The conclusions reached are as follows:

(1) The danger of glycerin-poisoning increases with the quantity of the drug, the tissue, and pressure. Children are poisoned by relatively smaller quantities than adults.

(2) A dose of ten cubic centimetres in children and twenty cubic centimetres in adults is almost always well borne.

(3) Poisoning is easily produced by parenchymatous injections.

(4) In cold abscesses with a pyogenic membrane three or four times as much can be injected as is permissible in other parts.

(5) Fresh wounds and large joints are especially liable to absorb the drug.

It has been proposed to give up the use of glycerin, substituting olive oil for it, but the therapeutic effect of that mixture has been found much inferior to iodoform and glycerin.—*Archives für klinische Chirurgie,* Band XLIX, Heft 2.

II. Traumatic Origin of Tumors. By Dr. CARL LOWENTHAL (Munich). The author has gone over the literature of this subject and has collected reports of 800 tumors which show traumatic